

IN THE CLAIMS:

1. (Currently amended) Sound generating apparatus comprising:

- a first cavity-(110);
 - a second cavity-(120); and
 - an electro-mechanical transducer-(100),
- said electro-mechanical transducer-(100) for exciting sound waves in said first cavity-(110) and said second cavity, wherein said electro-mechanical transducer separates said first cavity and second cavity-(120);
- a third cavity-(130), being wherein said third cavity-(130) is connected to said first cavity-(110) via at least one first passage-(115) of predefined shape ~~shape~~, and said third cavity-(130) is connected to said second cavity-(120) via at least one a second passage-(125) of predefined shape,
- said third cavity-(130) having one or more outlets-(150) allowing sound waves to radiate-(160) into an exterior of said apparatus;

wherein said first cavity and said first passage are dimensioned to provide an acoustic resonance at approximately 3.5 kHz, wherein said second cavity and said second passage are dimensioned to provide an acoustic resonance at approximately 400 Hz, wherein said third cavity and said one or more outlets are dimensioned to provide an acoustic resonance at approximately 6.7 kHz, such that said sound generating apparatus has a low frequency range amplification in a frequency range between 300 Hz and 500 Hz and a sound generating apparatus provides for acoustical amplification in a low frequency range,

~~wherein said sound generating apparatus also provides for acoustical amplification in a high frequency range, wherein said high frequency range amplification is in~~ a frequency range between 850 Hz and 7 kHz.

2. (Original) Apparatus according to claim 1, wherein said high frequency range amplification serves for acoustical amplification in a frequency range between 950 Hz and 7 kHz.
3. (Currently amended) Apparatus according to claim 2, wherein said high frequency range amplification serves for acoustical amplification in a frequency range between ~~2 kHz~~ 3 kHz and 7 kHz.
4. (Cancelled)
5. (Previously Presented) Apparatus according to claim 1, wherein said sound generating apparatus is adapted to a perceptible frequency range of human organs of hearing, which ranges approximately from 20 Hz to 18 kHz.
6. (Currently amended) Apparatus according to claim 1, wherein said electro-mechanical transducer-~~(100)~~ has a main direction-~~(185)~~ for emitting sound and a supplementary direction-~~(190)~~ for emitting sound, wherein sound waves emitted along said main direction-~~(185)~~ are radiated into said first cavity ~~(110)~~ and sound waves emitted along said supplementary direction ~~(190)~~ are radiated into said second cavity-~~(120)~~.
7. (Currently amended) Apparatus according to claim 1, wherein said first cavity ~~(110)~~ has a first volume and said second cavity-~~(120)~~ has an essentially bigger second volume.
8. (Currently amended) Apparatus according to claim 1, wherein said first cavity ~~(110)~~ and said third cavity ~~(130)~~ have substantially an approximately same volume.
9. (Currently amended) Apparatus according to claim 1, wherein said first cavity ~~(110)~~ and said second cavity ~~(120)~~ are arranged adjacent to each other, wherein

said first cavity (110) and said second cavity (120) are spatially separated from each other by said electro-mechanical transducer (100).

10. (Currently amended) Apparatus according to claim 1, wherein said electro-mechanical transducer (100) is a loudspeaker.

11. (Currently amended) Apparatus according to claim 1, wherein said apparatus is suitable for being implemented in a portable electric device (200).

12. (Currently amended) Mobile electric device comprising a sound generating apparatus comprising:

a first cavity (110);

a second cavity (120); and

an electro-mechanical transducer (100),

said electro-mechanical transducer (100) for exciting sound waves in said first cavity (110) and said second cavity (120), wherein said electro-mechanical transducer separates said first cavity and second cavity;

a third cavity (130), ~~wherein said third cavity (130) is~~being connected to said first cavity (110) via ~~at least one a~~ first passage (115) of predefined ~~shape, shape~~ and said third cavity (130) is connected to said second cavity (120) via ~~at least one a~~ second passage (125) of predefined shape,

said third cavity (130) having one or more outlets (150) allowing to radiate sound waves (160) into ~~the an~~ exterior of said device;

wherein said first cavity and said first passage are dimensioned to provide an acoustic resonance at approximately 3.5 kHz, wherein said second cavity and said second passage are dimensioned to provide an acoustic resonance at approximately 400 Hz, wherein said third cavity and said one or more outlets are dimensioned to provide an acoustic resonance at approximately 6.7 kHz, such that said sound generating apparatus has a low frequency range amplification in a frequency range between 300 Hz and 500 Hz and a sound generating apparatus provides for acoustical amplification in a low frequency range;

~~wherein said sound generating apparatus also provides for acoustical amplification in a high frequency range, and wherein said high frequency range amplification is located in a frequency range between 850 Hz and 7 kHz.~~

13. (Currently amended) System for generating sound comprising:

a first cavity-(110);

a second cavity-(120); and

an electro-mechanical transducer-(100),

said electro-mechanical transducer-(100) for exciting sound waves in said first cavity (110) and said second cavity-(120), wherein said electro-mechanical transducer separates said first cavity and second cavity;

a third cavity-(130), ~~wherein said third cavity (130) is~~being connected to said first cavity-(110) via ~~at least one~~a first passage-(115) of predefined shape, and said third cavity-(130) is connected to said second cavity-(120) via ~~at least one~~a second passage-(125) of predefined shape,

said third cavity-(130) having one or more outlets-(150) allowing sound waves to radiate-(160) into an exterior of said system;

wherein said first cavity and said first passage are dimensioned to provide an acoustic resonance at approximately 3.5 kHz, wherein said second cavity and said second passage are dimensioned to provide an acoustic resonance at approximately 400 Hz, wherein said third cavity and said one or more outlets are dimensioned to provide an acoustic resonance at approximately 6.7 kHz, such that said sound generating system has a low frequency range amplification in a frequency range between 300 Hz and 500 Hz and a system for generating sound provides for acoustical amplification in a low frequency range,

~~wherein said system for generating sound provides also for acoustical amplification in a high frequency range, and wherein said high frequency range amplification is located in a frequency range between 850 Hz and 7 kHz.~~

14. (New) Apparatus according to claim 1, wherein said third cavity causes a shift of a main resonance of said electro-mechanical transducer to lower frequencies.

15. (New) Apparatus according to claim 14, wherein said third cavity causes said shift of said main resonance in the range of approximately 950 Hz to a range of approximately 850 Hz.

16. (New) Apparatus according to claim 1, wherein said low frequency acoustic signals are excited in the first cavity and the second cavity, wherein the second passage is dimensioned that said low frequency acoustic signals emitted by the first cavity through said first passage and the second cavity through said second passage superimpose constructively.

17. (New) Apparatus according to claim 1, wherein said first cavity has a volume in a range of 150 mm^3 to 250 mm^3 , wherein said second cavity has a volume in a range of 2 cm^3 to 3 cm^3 ; wherein said second cavity has a volume in a range of 150 mm^3 to 250 mm^3 .

18. (New) Apparatus according to claim 1, wherein said first cavity has a volume of approximately 180 mm^3 , wherein said second cavity has a volume of approximately 2.6 cm^3 ; wherein said third cavity has a volume of approximately 200 mm^3 .